



SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation

**Federal Aviation
Administration**

SW-05-65
June 29, 2005

<http://www.faa.gov/aircraft/safety/alerts/>

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin alerts you, aircraft owners and operators, that there have been two incidents involving **Laserdyne Black Opal Flat Panel Display RMU10H video monitors**, one on June 7, 2005, and a second on June 24, 2005. The glass face on the flat panel display ruptured under pressure and blew glass into the cockpit. We have no reports of injuries although the crew was hit by flying glass from the failed display. Although these failures occurred on helicopters, these units may also be installed on fixed wing aircraft. This may affect other Laserdyne Black Opal models to include: Any model RMU6, RMU8, RMU10 or RMU12, with any suffix (suffixes include but are not restricted to, AH, AS, H, HX, S), that may be used in airborne applications.

Background

The video display is used for a comprehensive wide range of video processing and image enhancement functions. The failed video monitors were installed under FAA field approval procedures; however, other units may have entered service by other approved means.

On the flights where the units failed, the helicopters had reached a cruising altitude of approximately 6,500 feet and had been at that altitude for approximately 15 minutes. Without warning, the glass on the front of the units ruptured, ejecting glass fragments into the cabin. The RMU10H continued to operate normally, with video images on the screens.

Laserdyne determined that both of the failed displays might have had defective glass fronts, which couldn't be detected in the Laserdyne testing processes. Both displays were manufactured at the same time, indicating that Laserdyne may have received a faulty batch of glass from the supplier.

Laserdyne issued a Product Notice, June 26, 2005, (attached) that provides an interim measure to prevent the possibility of glass failure. Laserdyne has changed their testing procedures and is going to modify all existing and future displays.

Recommendations

Before further flight, as an interim corrective measure on Laserdyne Black Opal units used to display non-essential information, we highly recommend you comply with the attached Laserdyne Product Notice that requires removing one purge screw and o-ring from all displays. This will allow the displays to operate normally. The purge screw is usually located on the underside of the unit and is painted **RED**.

The manufacturer has cautioned that some fogging of the glass may occur at cold temperatures when you remove the screw. If the unit is used to display essential information, we recommend you contact your local Flight Standards District Office (FSDO) for additional information.

For Further Information Contact

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PRODUCT NOTICE

for

Black Opal Flat Panel Display Systems

26 JUNE, 2005

ATTENTION ALL USERS IN AIRBORNE APPLICATIONS: IMMEDIATE ACTION REQUIRED.

Purpose of Notice

Elimination of potential glass window failure in Black Opal flat panel displays systems.

Eligible Models

Any model RMU6, RMU8, RMU10 or RMU12, with any suffix there to (suffixes include but are not restricted to, AH, AS, H, HX, S), that may be used in airborne applications.

Background

There is a possibility that glass windows in these models may fail under conditions of lowered ambient pressure (i.e. at altitude).

The statistics to date indicate a very low probability of occurrence (2 units out of 380 have failed over an 8 year period), however the aim of this notice is to eliminate further occurrences.

*****IMMEDIATE ACTION*****

For all of the eligible models listed in this notice that may be used in airborne applications:

Remove one of the purge screws from the unit. These are painted red, and are usually located on the underside of the unit. The removed screw and its o-ring may be discarded.

This is an interim measure which removes the possibility of glass failure. IT SHOULD BE REGARDED AS A MANDATORY ACTION.

Note: a possible adverse effect of this action is fogging of the internal surface of the window when cold.

Further Action

Contact your local service agent regarding this notice, to schedule for a minor modification to eligible units. This may be done at a time that suits your own maintenance schedule **PROVIDED THAT** the Immediate Action described in this notice has been taken.

This modification shall restore the sealing of the unit, and shall include purge and backfill operations.

More Information

If more detail is required, please contact your local service centre, or Laserdyne Pty Ltd:

'ph: +61 3 9390 6830 or +61 413 377 125

email: laser_vic@laserdyne.com.au

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